A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 F02M31/10 F02B29/04 F02M25/07

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC 7 F02M F02B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

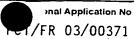
3 3

EPO-Internal, PAJ

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Х	EP 1 170 498 A (PEUGEOT CITROEN AUTOMOBILES SA) 9 January 2002 (2002-01-09) column 7, line 50 -column 8, line 23; figures 1-5	1-11
:	column 9, line 1 - line 54	
X	DE 199 24 677 A (DAIMLER CHRYSLER AG) 10 August 2000 (2000-08-10) column 2, line 36 - line 43 column 4, line 56 - line 68; figures 1,2	1,2,4, 7-9
X	DE 40 33 796 A (KLOECKNER HUMBOLDT DEUTZ AG) 30 April 1992 (1992-04-30) column 2, line 32 - line 62 column 3, line 12 - line 68; figures 1,2	1,2,7,8

X Patent family members are listed in annex.	
T later document published after the international filing date or priority date and not in conflict with the application but died to understand the principle or theory underlying the invention	
 X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. *&* document member of the same patent family 	
Date of mailing of the international search report	
10/07/2003	
Authorized officer	
Raposo, J	

INTERNATIONAL SEARCH REPORT



C.(Continu	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	FFR 03/00371
Category °	Citation of document, with indication where appropriate, of the relevant passages	Relevant to claim No.
X	PATENT ABSTRACTS OF JAPAN vol. 2002, no. 05, 3 May 2002 (2002-05-03) & JP 2002 021653 A (NIIGATA ENG CO LTD), 23 January 2002 (2002-01-23) abstract	1,2,4
X A	US 6 167 703 B1 (SCHMIDT ERWIN ET AL) 2 January 2001 (2001-01-02) column 3, line 23 - line 44; figure 1 column 6, line 43 - line 64	1 2-6
x	US 4 348 991 A (STANG JOHN H ET AL) 14 September 1982 (1982-09-14) column 5, line 28 -column 6, line 18; figures 1-4 column 8, line 35 - line 57	1,2
(US 3 977 195 A (TREUIL BERNARD) 31 August 1976 (1976-08-31) column 6, line 34 -column 7, line 8; figures 1,2	1,2
	US 4 207 848 A (DEUTSCHMANN HERBERT ET AL) 17 June 1980 (1980-06-17) column 1, line 54 - line 61; figure 1	1
		·
		·